

### **Abstract**

An automatic air intake control includes a timing mechanism that regulates the amount of air entering a combustion chamber enclosure during combustion of a fuel. The amount of air is regulated to provide an efficient and clean burn of a solid  
5 fuel. The control may include a cover, an actuating assembly, and a controller. The cover is movable between open and closed positions relative to an air passage opening into the combustion chamber enclosure. The actuating assembly is coupled to the cover and configured to move the cover between the open and closed positions. The controller is coupled to the actuating member and configured to control the position of the cover  
10 through the actuating member to regulate the air intake into the combustion chamber. The controller may be a time-based device such as a timer, or may be any other device that uses inputs associated with the combustion of fuel in the combustion chamber or a user's preferences for the characteristics of combustion in combustion chamber.